

*Please replace the paragraph beginning at line 22 of page 202, with the following amended paragraph:*

To 469.8 parts by weight of the aforementioned titanium dioxide dispersion, 40.0 parts by weight of a mixture of dipentaerythritol pentaacrylate and dipentaerythritol hexaacrylate (DPHA<sup>®</sup>, manufactured by Nippon Kayaku Co.), 3.3 parts by weight of a photopolymerization initiator (Irgacure 907, manufactured by Nippon Ciba-Geigy Ltd.), 1.1 parts by weight of a photosensitizer (Kayacure DETX, manufactured by Nippon Kayaku Co.), 526.2 parts by weight of methyl ethyl ketone and 459.6 parts by weight of cyclohexanone were added and agitated. Then the mixture was filtered by a polypropylene filter of a pore size of 0.4  $\mu\text{m}$  to obtain a coating liquid for a high-refractive index layer-2.

Change(s) applied to document, *Please replace the paragraph beginning at line <sup>38</sup>5 from the bottom of page 211, with the following amended paragraph:*

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5.6 parts by weight of a mixture of dipentaerythritol pentaacrylate and dipentaerythritol hexaacrylate (DPHA<sup>®</sup>, manufactured by Nippon Kayaku Co.), 1.4 parts by weight of the aforementioned fluorine-containing polymer (FP-1), 20.0 parts by weight of hollow silica (CS60-IPA, 20 weight% dispersion in isopropanol, manufactured by Catalysts & Chemicals Ind. Co.), 0.7 parts by weight of RMS-033 (reactive silicone, manufactured by Gelest Inc.), 0.2 parts by weight of a photopolymerization initiator (Irgacure 907, manufactured by Ciba Specialty Chemicals Inc.), 6.2 parts by weight of the sol liquid a (described above) and 315.9 parts by weight of methyl ethyl ketone were added and agitated. After sufficient agitation, the mixture was filtered by a polypropylene filter of a pore size of 1  $\mu\text{m}$  to obtain a coating liquid LL-5 for a low-refractive index layer.

*Please replace the paragraph beginning at line 7 of page 222, with the following amended paragraph:*

88.9 parts by weight of an aforementioned titanium dioxide dispersion, 58.4 parts by weight of a mixture of dipentaerythritol pentaacrylate and dipentaerythritol hexaacrylate (DPHA<sup>®</sup>), 3.1 parts by weight of Irgacure 907, 1.1 parts by weight of Kayacure DETX (manufactured by Nippon Kayaku Co.), 482.4 parts by weight of methyl ethyl ketone, and 1869.8 parts by weight of cyclohexanone were agitated and filtered with a polypropylene filter of a pore size of 0.4  $\mu\text{m}$  to obtain a coating liquid for a middle-refractive index layer.

of the translucent layer by the first and second translucent particles is sufficiently formed, drying, and irradiating with light and/or heat

*Please replace the paragraph beginning at line 6 of page 95, with the following amended paragraph:*

Specifically, taking into consideration the maintenance of good productivity and the restraint of the occurrence of the lack of uniformity of air, average drying rate from casting of a dope to peeling is preferably more than 300 weight%/min and ~~[[100]]~~ 1000 weight%/min or less, more preferably more than 400 weight%/min and 900 weight%/min or less, and most preferably more than 500 weight%/min and 800 weight%/min or less.

*Please replace the paragraph beginning at line 16 of page 95, with the following amended paragraph:*

Peeling process is a process of peeling the web from which the solvents have been evaporated at the peeling position. The peeled web is transferred to the next process. When the residual amount (the following equation) of the solvent at peeling point is too great, peeling is difficult, while when the web is too dried on the support, a part of the web is peeled halfway. For increasing film-forming rate (a film-forming rate can be increased, since a web is peeled while the residual solvent is left as great as possible), a gel-casting method is known. This method includes a method of adding a bad solvent for cellulose ester during doping, and performing gelation after casting of dope, and a method of gelation by lowering the temperature of a metal support. By increasing the film strength at peeling time by gelation on the support, peeling can be expedited and film-forming ~~[[rate]]~~ time can be shortened. The residual amount of the solvent of the web after peeling can be determined by the length of the metal support.

Change(s) applied to document, *Please replace the paragraph beginning at line 29 of page <sup>131</sup>~~132~~, with the following amended paragraph:*

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Preferable silicone compounds include but are not limited to the following; "X-22-174 DX," "X-22-2426," "X-22-164b," "X22-164C," "X-22-170DX," "X-22-176D" and "X-22-1821" [trade name: Shin-Etsu Chemical Co., Ltd.]; "FM-0725," "FM-7725," "DMS-U22," "RMS-033," "RMS-083" and "UMS-182<sup>®</sup>" [trade name: Chisso Corporation].

*Please replace the paragraph beginning at line 24 of page 25 with the following amended paragraph:*

Not specifically defined, the surface free energy lowering binder for use in the low-refractive index layer of the antireflection film of the invention may be any one that may of significantly lower the surface free energy of the layer that is formed as a result of curing of an alkyl acrylate monomer such as typically DPHA<sup>®</sup>, when the binder is added to the layer. Especially preferably, the binder is such that the surface free energy of the layer cured and formed only by the binder is at most 30 mN/m, more preferably at most 25 mN/m, even more preferably at most 20 mN/m. The binder is preferably a compound containing at least one group selected from a fluoroalkyl group, a dimethylsiloxane group, and a polydimethylsiloxane (silicone) group. Before cured, the binder may be either monomer or polymer, or may be a mixture of monomer and polymer, or may be a mixture of multiple compounds.

*Please replace the paragraph beginning at line 7 of page 38, with the following amended paragraph:*

The amount of the acid catalyst to be used is described. When the acid catalyst is an inorganic acid, then its amount may be from 0.01 to 10 mols, preferably from 0.1 to 5 mols relative to the hydrolyzable group; but when the acid catalyst is an organic acid, then its most preferred amount varies depending on the amount of water added to the system. Concretely, when water is added to the system, the amount of the organic acid to be added thereto may be from 0.01 to 10 mol%, preferably from 0.1 to 5 mol% relative to the hydrolyzable group. However, when substantially no water is added, then the amount of the organic acid to be added may be from 1 to 500 mol%, preferably from 10 to 200 mol%, even more preferably from ~~[[290]]~~ 20 to 200 mol%, still more preferably from 50 to 150 mol%, further more preferably from 50 to 120 mol% relative to the hydrolyzable group.

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*Please replace the paragraph beginning at line 17 of page 68, with the following amended paragraph:*

The light-diffusing layer can be formed by coating a light-diffusing layer-forming composition by well known thin film-forming methods, such as dip coating, air knife coating, curtain coating, roller coating, wire bar coating, gravure coating, micro-gravure coating or extrusion coating, allowing the coated layer to stand until the surface unevenness configuration

thereof, so far as it is effective for significantly lowering the surface free energy defined above of the antireflection film when it is applied to the film. In general, the surface free energy depression is not linear relative to the amount of the compound applied to the film, and it may be saturated with the increase in the amount thereof. For example, in a surface free energy depression profile curve prepared by plotting the surface free energy depression points relative to the amount of a cured matrix formed of a binder such as DPHA<sup>®</sup>, the surface free energy depression relative to the amount of the compound added to the surface free energy depression saturation point is preferably at least 10 mN/m, more preferably at least 20 mN/m, even more preferably at least 25 mN/m, most preferably at least 30 mN/m.

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*Please replace the paragraph beginning at line 9 from the bottom of page 22, with the following amended paragraph:*

Preferred examples of the silicone compound are those having a substituent at least in any of terminals and side branches of a compound chain that contains multiple dimethylsilyloxy units as repetitive units. The compound chain containing repetitive dimethylsilyloxy units may contain any other structural unit than dimethylsilyloxy units. Preferably, the compound contains multiple substituents that may be the same or different. Examples of preferred substituents are those containing any of an acryloyl group, a methacryloyl group, a vinyl group, an aryl group, a cinnamoyl group, an epoxy group, an oxetanyl group, a hydroxyl group, a fluoroalkyl group, a polyoxyalkylene group, a carboxyl group, and amino group. Though not specifically defined, the molecular weight of the compound is preferably at most 100,000, more preferably at most 50,000, most preferably from 3,000 to 30,000. Also not specifically defined, the silicone atom content of the silicone compound is preferably at least 18.0 % by weight, more preferably from 25.0 to 37.8 % by weight, most preferably from 30.0 to 37.0 % by weight. Examples of the preferred silicone compounds are Shin-etsu Chemical's X-22-174DX, X-22-2426, X-22-164B, X22-164C, X-22-170DX, X-22-176D, X-22-1821 (all trade names), Chisso's FM-0725, FM-7725, FM-4411, FM-5521, FM-6621, FM-1121, and Gelest's DMS-U22, RMS-033, RMS-083, UMS-182<sup>®</sup>, DMS-H21, DMS-H31, HMS-301 (all trade names), to which, however, the invention is not limited.